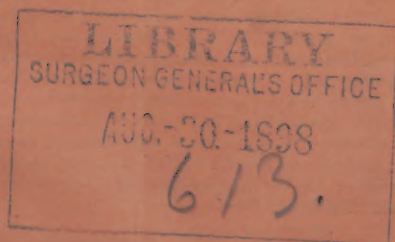


Death (The) of disease

++++



PROOFS
THAT
CONSUMPTION
CAN BE
CURED.





ROBERT KOCH.

From Appleton's Popular Science Monthly, Dec., 1889.

One of the most eminent of the collaborators of Pasteur in the investigation of the relations of micro-organisms to disease infection, and one whose labors have been most fully appreciated by intelligent men, is Dr. Robert Koch, of Berlin. He was born at Clausthal on the 11th of December, 1843, the son of a high officer in the department of mines. He attended the gymnasium in his native town, and afterward—from 1862 to 1866—studied medicine at Gottingen. He became an assistant in the Allgemeine Krankenhaus, or General Hospital, at Hamburg; began the practice of medicine in 1866 at Langenhagen in Hanover; then settled at Racknitz, in Posen. From 1872 till 1880 he was *physikus* or district physician at Wallstein, in the district of Bomst. He engaged in studies of bacteriological diseases, including wound-infections, septicæmia, and anthrax, or splenic fever, with great success; and was appointed in 1880 a member in ordinary of the Imperial Health Office. In 1885 he was appointed a professor, and the director of the Hygienic Institute in Berlin.

(Continued on third page of cover.)

✓

THE
DEATH OF DISEASE GERMS
AND
THE RADICAL CURE
OF
Consumption, Catarrh,
ASTHMA AND BRONCHITIS,
BY THE
DR. LOUIS WEIGERT
"PERFECTION"
SUPERHEATED DRY-AIR INHALER.

Indorsed by the most eminent living Specialists in England,
Germany, France and America.

LIBRARY
SURGEON-GENERAL'S OFFICE
Tested by the Surgeon-General in the U. S.
Marine Hospitals.

AUG.-30-1898
613.

THE DR. LOUIS WEIGERT CO.,

No. 23 PARK PLACE,
NEW YORK.

WARNING.

LETTERS PATENT

Having been issued to DR. LOUIS WEIGERT for the HOT-AIR INHALATION APPARATUS for the CURE OF CONSUMPTION, etc., *notice is hereby given* that any person or persons manufacturing, buying or selling any apparatus infringing in any manner upon his rights will be prosecuted to the full extent of the law. All his apparatus are stamped with a fac-simile of his signature

Dr. Louis Weigert



(TRADE MARK.)

COPYRIGHTED.

ENTERED ACCORDING TO ACT OF CONGRESS IN THE OFFICE OF THE
LIBRARIAN OF CONGRESS, WASHINGTON, D. C., 1890.

CONSUMPTION.

Consumption! Portentous word, pregnant with death and misery, sad reminder to thousands of families whose loved ones it has snatched from them, and in whose direful path hung with crape and moistened with bitter tears is left misery, loneliness, desolation and sorrow. Ghastly monumental epitaph to one-third of all the deaths in the world; huge vampire, beneath the black shadows of whose wings crouch widows, orphans and a multitude of bereaved.

Since the earliest days of which we have any record this fell scourge has been devastating the world. Recent statistics show that the yearly deaths are three millions from Consumption alone in all the world (Appleton's Encyclopædia) and that in the United States alone, in 1888, out of 760,000 deaths, 92,000 were due to consumption. The evils and ravages of war, pestilence and the most virulent epidemics pale with puny insignificance before this terrible showing of this most malignant of all destroyers. Nor is this frightful mortality confined to any one class or age. The very rich and the very poor suffer alike, and grim death makes itself felt at every step from the cradle to the grave.

Until a very recent date this grim spectre has gone about its terrible work wholly unhindered and unmolested. Even the best physicians came to use the hackneyed formula of "Florida and Cod Liver Oil," and year after year thousands upon thousands went from doctor to doctor, land to land, and climate to climate, stronger to-day, weaker to-morrow, buoyed by false hopes and deceived by kindly meant words of encouragement, until at last, weak, wasted and finally reconciled to the inevitable, Death, tender at the last moment, blew out the dim and flickering flame.

Koch's Great Discovery of the Consumption Germ (Bacillus).

It remained for Koch, of Germany, to rouse the medical world from its hopeless apathy and acceptance of the seemingly inevitable on this subject, and point out and clearly demonstrate to them that the real nature, the true inherent cause of Consumption had never been fully understood by the profession, and that the treatment so universally adopted, and so wholly inadequate to meet and to conquer the ravages of the disease was radically wrong, being only directed towards its most apparent symptoms. He proved conclusively :

That in every case of Consumption, old or recent, a peculiar disease germ known as the Tubercle Bacillus was to be found in the diseased lung tissue, in the expectorated matter and in the person's breath.



(Tubercle Bacilli from a Cavity).

That these Tubercle Bacilli, when collected and placed under the skin or in the circulation of any other animal, produced every symptom of Consumption, ending

in death, and that the lungs, breath and sputum of such animals were loaded with these Bacilli.

That this Tubercle Bacillus was peculiar to Consumption and was never found in any other disease, and whenever found was a certain indication of Consumption.

That these Bacilli were hatched in regular broods in the lungs of Consumptives, and that each of such hatchings was productive of fever and sweating.

Directly after Koch's remarkable discovery, which set the whole medical world to talking, and each detail of which has been indisputably proven and re proven by the very best microscopists and pathologists in France, Germany, England and America, the most strenuous efforts were made to discover some drug that would or could kill or render inactive these Tubercle Bacilli. The result was disappointing and disheartening in the extreme. No medical or antiseptic substance, unless strong enough to *injure the lungs*, could be found to do the work.

Dr. Louis Weigert's Remarkable Discovery.

Not until Dr. Louis Weigert, of Berlin, made the discovery that *dry hot air* would destroy and prevent the breeding of these germs, and not only not injure, but positively strengthen the weakened and diseased lung tissues, did the profession awake to the marvelous fact that a positive, scientific and satisfactory cure for Consumption had been found.

Dr. Weigert found, and Pasteur, Toussaint and others have conclusively proven, that the bacilli of Consumption can only flourish in a temperature equal to the normal temperature of the human body, namely, 98.5° Fahrenheit. A trivial raising of the temperature considerably hinders the power of development and increase of the tubercle-bacilli. For instance, at 101.3° they hardly increase at all, at 107.6° their development ceases altogether, and when exposed to a temperature of 122° they die within one month. The destruction of the tubercle-bacilli

is synonymous with the cure of the disease, for the moment they are gone or inactive, nature steps in, quickly heals the ulceration, cicatrizes and contracts the cavities, gives strength, appetite, vigor and health again.



(Tubercle Bacilli containing Spores.)

It therefore occurred to Dr. Weigert (*Die Heissluft Behandlung der Lungentuberkulose*, Berlin, 1889), that by means of an apparatus that would admit of a consumptive patient daily inhaling dry air of a proper degree of heat, the growth and increase of the tubercle-bacilli would at first be hindered and gradually all would be killed off. The result of this was the **Dr. Weigert Superheated Dry Air Inhaler**, now patented in every civilized country in the known world, and endorsed by every unbiased physician as the only real cure for Consumption. It has now been in use over a year, and the whole medical world has combined to praise the results obtained. Cures of Consumption, even in its worst stages, have taken place, and the number of cases of incipient or commencing Consumption, in which the disease has been forever stamped out, is almost incalculable. To the truth of these claims we have simply to refer the reader to the German, French, English and American medical journals, reports of cases, transactions of learned societies and the accompanying letters from doctors and patients in every part of the world. We would call especial attention to the article by Alexander Bowie, M.D., M.S., in the London *Lancet* of Sept. 14, 1889, to the report of Dr. Berry, of Chicago, and to the Lecture by Prof. Kohlschutter before the Physicians' Society of Halle, Prof. Weber, Director of the Medical Clinic and Polyclinic of the University of Halle presiding.

Besides these, note the thousands of physicians in every part of the world who are ordering the DR. WEIGERT INHALERS for their patients from our various branch houses.

In America the Superheated Dry Air Inhalers have met with even greater success than in Europe, and are even more enthusiastically endorsed by the better class of physicians. Take, for instance, the following from the Ex-Surgeon-General of Connecticut.

STATE OF CONNECTICUT,
Surgeon-General's Office,
WILLIMANTIC, October 25th, 1889.

G. E. WILCOX, D.D.S.

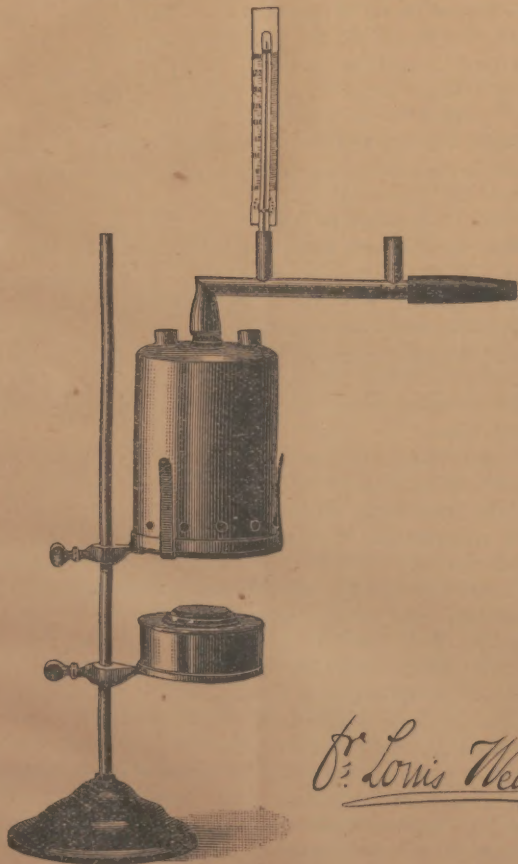
My Dear Doctor: I have carefully examined your pamphlet you kindly sent me with your interesting history of "The Inhalatory Treatment of Phthisis Pulmonalis by means of Superheated Air," published by Alex. Bowie, M.D., in *The Lancet*, London, England, September 14th, 1889, and I am very much impressed with the results therefrom. I cordially commend Weigert's apparatus as the best known yet to medical science, and the treatment of phthisis pulmonalis by superheated air as one that commends itself to every medical man who is interested in the progress of our noble profession.

I am, very truly yours,

(Signed) CHARLES JAMES FOX, M.D.,
Ex-Surgeon General of Conn.

The Dr. Louis Weigert "Perfection" Hot Air Machine for Catarrh, Consumption, Asthma and Bronchitis.

Price, - - \$25.



Dr. Louis Weigert

Letters Patent

Having been issued to Dr. Louis Weigert for the Hot Air Inhalation Apparatus for the Cure of Consumption, etc., notice is hereby given that any person or persons manufacturing, buying, or selling any apparatus infringing in any manner upon his rights will be prosecuted to the full extent of the law. All his apparatus are stamped with a fac-simile of his signature.

What the Weigert Machines Do.

From an Article by Dr. Louis Weigert.

(Translated from the German.)

"All the different kinds of bacteria can only flourish within certain well-defined limits of temperature. That degree of temperature which best favors the development of any sort of bacteria we may call their normal temperature. The power of life and of development in these bacteria can be influenced, lowered, and even entirely destroyed, by temperature above or below their own particular norm. Pasteur first taught us this, by his weakening of the virus of chicken-cholera; and later, both Toussaint and Pasteur have proved the same truth, in their protective vaccination against anthrax (the "wool-sorters' disease"). They weakened the anthrax germs by exposing them to a heat of 108.6 degrees Fahrenheit. Within 24 days these germs were so far weakened in virulence that guinea-pigs, injected with these modified cultures, were able to withstand the infection or poisoning. In other words, the organism which would surely and certainly have fallen a victim to bacilli that had NOT been exposed to the weakening effect of the heat of the breeding stove, was able to withstand the weakened poison with ease.

"In these artificial weakenings of which I have spoken, the bacteria lose a portion of their virulence; that is to say, their poisonousness; but there is no visible change in them. Now if these weakened cultures are further cultivated, the later generations retain their property of diminished virulence. Such weakenings can also be produced in the tubercle-bacilli (although they are, as regards anti-parasitic drugs, certainly among the strongest and most resisting of all) for their life and development are strictly confined to a certain and very restricted range of temperature. Their norm of temperature is exactly that of the human body, namely, 98.5 degrees Fahrenheit. The result of experiments made by several scientific men proved, in all cases, that quite trivial raising of the temperature considerably hindered the power of development and increase of the tubercle-bacilli. For instance, at 101.3 degrees Fahrenheit, they hardly grow at all; and at 107.6 degrees their development ceases altogether. When they are exposed to a temperature of 122 degrees Fahrenheit, they die within one month; and one single boiling is sufficient to destroy them entirely.

"Now these facts gave me the idea of attacking the tubercle-bacilli in their weak point; that is to say, by exposing them in the lungs to a high degree of heat, so as to weaken them, and to

hinder their development and multiplication—so that they may be finally destroyed within the body. From the beginning this appeared to me to be possible; the only question at that time was, whether the human lungs were capable of resisting this superheated air without difficulty. And, now that I have solved this question, the doubt still remains among those medical men who content themselves with a superficial judgment of my method, without a thorough examination of it.

“ I had experience on my side, in so far as the so-called hot chambers of the Russian baths show a temperature of 212 degrees Fahrenheit; and that, in several branches of industry, the workmen are, for a longer or shorter time, exposed to still higher temperatures without evil effects. It appears, therefore, evident that man is able, without any evil consequences, to breathe air which is heated to a degree sufficient to have a weakening and destructive effect on the tubercle-bacilli.

“ My researches and experiments in this direction (which were first tried on my own body) proved the entire justice of my reasonings in all points, and fully convinced me that man is able to breathe without difficulty, and for protracted periods, air heated to 320 or even 356 degrees Fahrenheit; and that the consequences of breathing such heated air are as follows:

- (1) An acceleration of the pulse for the first few minutes only.
- (2) A retardation of the frequency of respiration (*i.e.*, slower breathing).
- (3) Deeper inspiration.
- (4) A raising of the temperature of the whole body, from one to two degrees Fahrenheit.
- (5) The exhaled air shows a temperature of at least 113 degrees Fahrenheit.
- (6) Within an hour after the experiment is over the temperature of the body returns to the normal point.
- (7) The general health remains entirely undisturbed.

I have very frequently repeated these experiments, and always with the same results, namely, that the breathing of heated air has no injurious effect on the human body: and I did not extend the experiments to sick persons until these repeated experiments had removed from my mind every possible particle of doubt as to their results.

If I were to cite in this pamphlet the numerous cases which I have treated, and almost universally with equal success, it is quite possible I might be accused of using them as advertisements of my curative method of treatment. I therefore content myself with merely stating results, brought about by breathing heated

air, in almost all the patients treated in accordance with my theory. The results are :

1. Removal of any dyspnœa (difficulty of breathing) which might happen to exist.
2. Lessening of the cough, up to total cessation of it.
3. In the very first few days, especially during inhalation, an increase of the expectoration, afterwards considerable diminution, to complete disappearance of it.
4. Cessation of the fever.
5. Cessation of the night sweats.
6. Increase of appetite.
7. Accession of bodily strength.
8. In most cases, after a short period, an entire stoppage of the progress of the disease.
9. Less frequent occurrence, and afterwards total disappearance of hemorrhages from the lungs.
10. Removal of catarrhal symptoms.
11. Clearing of infiltrated portions, i. e., of those portions of the lungs made impervious to the passage of air by the progress of the disease.
12. Disappearance of dilatations of the bronchial passages.
13. Cicatrization (healing) of the hollows or cavities in the lungs, caused by the disease.
14. Increase of weight is observed in the cases of those who entered upon the treatment in an extremely emaciated condition, and in those cases where the progress of the disease has not only been checked, but where recovery has commenced. The absence of increase of weight in the beginning is easily explainable, when we remember that the patients treated according to my method are not subjected to a fattening cure, and that the inhalations require more or less physical effort.
15. As regards the microscopic examination of the sputa (expectoration), undertaken with all my patients, there was a gradual decrease of elastic fibre in the sputa to total disappearance, as well as a rapid lessening of the quantity of the pus-corpuscles. Concerning the tubercle-bacilli in the sputa, it seems to me that, in the early days of inhalation, there is an increase of the bacilli, but afterwards a gradual decrease; their total disappearance means a complete cure. That this cure can only be a gradual one is easily explainable by what has already been said. Through occasional inhalation

of heated air, no immediate destruction of the bacilli is possible, but only a frequently interrupted weakening, a so-called discontinuous sterilization, in opposition to the continuous sterilization caused by continued direct influence of hot air upon the bacilli. The inhalations last only a few hours per day; the bacilli are only during this time exposed to the temperature which weakens them, and the temperature itself is by no means as high as it appears. For, even though the inhaled air shows 320 degrees F. at the mouth, yet it is considerably cooled on its way to the lungs, by contact with the tissues at their normal temperature of 98.5 degrees F., and the blood circulating in them. This lowering of the temperature is evident, from the fact that the expired air only shows 112 degrees F. Yet, as the air must of course have been still further cooled on its way back from the lungs, we may take it for granted that the air in the passages of the lungs must possess a much higher temperature than 113 degrees, and thus the object is obtained, namely, of weakening the tubercle-bacilli, till at last they are entirely destroyed. (I may here note that, in spite of many experiments, it has been hitherto impossible for me to fix the temperature of the air within the lungs; but doubtless our scientists will sooner or later find a method of ascertaining its temperature.)

Part II.

CATARRH, BRONCHITIS, ASTHMA.

Aside from its most remarkable curative effects in Consumption Dr. Weigert's method of inhaling Superheated Dry Air has produced some wonderful cures in other long standing and apparently incurable cases of lung disease—notably in Catarrh, Bronchitis, Bronchiectasis, Asthma, both nervous, spasmodic and organic. Even in those cases of Asthma where from structural changes in the lungs a radical cure is impossible, the most severe spasms may be almost instantly relieved, and the attack aborted by a few inhalations of the superheated dry air. So true is this that many Asthmatics who have tried these inhalations keep a Weigert machine constantly on hand, and at the first symptom of distress are able to cut it short without the slightest trouble.

In many instances the attacks become milder, occur at longer intervals and after a time fail to appear at all, and the dread disease is vanquished.

Chronic Bronchitis that for years has withstood every medicine, inhalant and nostrum, yields to a few weeks treatment by Dry Hot Air like a charm, and if after a cure has been accomplished the inhalation is occasionally indulged in, no recurrence of the malady need be feared, the lungs being permanently strengthened and purified. A most notable example of this is the case of Mr. George Weigert, the brother of the celebrated physician, who had for years been suffering with Asthmatic Bronchitis, and who had been treated to no good end by twelve of the best physicians in America and some in Europe. The first Hot Air machine that was sent to this country was tried upon himself, and the results were perfect. To-day, he is an absolutely sound and well man, and not a trace of his former distressing malady remains, and he can and will give the names of many more who have experienced like results. Mr. Weigert has no connection with this company, and no interest in making this statement save in so far as it may lead to the cure of others suffering as he did.

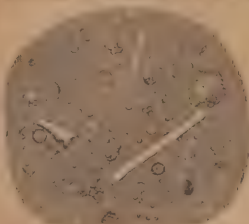
CATARRH.

Catarrh in this changeable climate of ours is a very common disease, and one that is very dangerous from the fact that it leads to Consumption. The Tubercle Bacilli breathed in with the air find lodgement and proper conditions for growth in the diseased mucous membranes of the head and nose from which it is almost impossible to dislodge or destroy them by any ordinary means.

Here they breed and multiply and with the mucus from the posterior nares, drop down into the throat and lungs, and throat consumption or lung consumption soon follows. In many cases, if the lungs are perfectly strong and sound, that does not take place, but if there is the slightest hereditary weakness, or if any diseased process is going on, the result is almost certain death from Consumption.

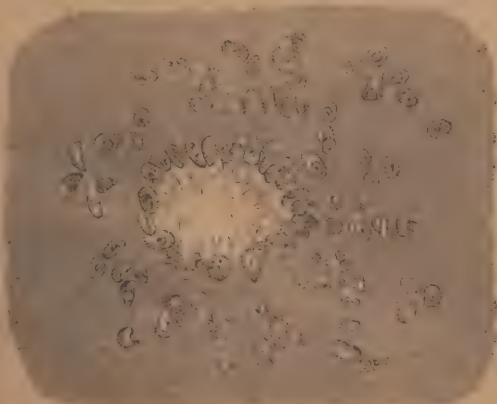
Hence the great importance of putting and keeping the nasal cavities in such a strong and healthy condition that if breathed in, these germs of that dread disease will not find lodgement and later, brood after brood multiplied, both in numbers and virulency, be sown in the lungs.

Consumption germs, scientifically known as the Tubercle Bacilli of Koch, are always floating in the air about us. When



(Bacilli and spores in the air.)

we know that one out of every six persons in the world has consumption in some of its phases or forms (The Climate and Statistics of Consumption : a paper read before the Amer. Geographical and Statistical Society, by Henry B. Millard, M.D.; Wm. Radde & Co., New York), and that each person thus affected is breathing out these disease germs at every breath expired, it is not surprising that so many new and wholly unexplained cases appear every week and every month. A person cannot ride down to business, attend a political meeting, go to church, or, indeed, go anywhere, where people are meeting together without breathing air containing this particular disease germ. The fact that more persons do not thus catch the disease is because their lungs do not present the proper conditions favorable to the breeding and development of the bacilli. It is like a minute plant seed. Drop it on dry earth and it will not sprout. Let the earth be moist but very cold and again it will not sprout. But let a proper soil be given, and at the same time heat and moisture be present, and the sprouting is a foregone conclusion.



(Tubercle of Consumption showing Bacilli of Koch).

Many people and many physicians have been puzzled by the suddenness of an attack of **pneumonia**. They can remember no particular exposure or wetting. Two men, for instance, ride down to business in the same car. In that car is a person who is consumptive. A's lungs are strong and healthy, except for a slight attack of bronchitis. B's lungs are naturally weak, hereditarily or otherwise. Both A and B breath in the consumption germs : in both they find lodgment in the lungs, and conditions

favorable for breeding. Both have an attack of pneumonia. In A's case the germs, having produced intense inflammation, die out, and he either dies from the acute disease or gets well. B, on the contrary, does not get well. His acute pneumonia becomes sub-acute, then chronic; and, finally, after weeks or months, develops into consumption. In his case, the high fever and natural strength of constitution could not destroy and kill off the germs. Brood after brood formed, more and more lung tissue became involved, here and there a blood vessel burst, cavities formed, tissues broke down, and, finally, true consumption appeared firmly developed. The cause was the same in both cases, the breeding and multiplying of consumption "germs."

In all "germ" diseases, such as Typhoid Fever, Scarlet Fever, Diphtheria, &c., &c., the chills indicate the initiation caused by these disease germs and the high fever is nature's effort to kill off the little bodies that are causing the trouble. *Nature had been trying and often succeeding in killing these germs by intense heat, long before Koch or Weigert made their great discoveries.*

Consumption is Contagious.

There are some who doubt the contagiousness of Consumption. Let such read the following extracts from Trouessart's most able work (*Microbes Ferments, and Moulds*, by E. Trouessart, International Scientific Series, Appleton & Co. 1886).

Now that this is known, it is easy to explain the facts of direct contagion which are so frequent among people living together, and especially from a husband to a wife, or conversely. Since the breath of a consumptive patient is always charged with germs of the disease, which abound in the cavities in which the sputum is formed, it could not possibly be otherwise. The following statements of facts are taken from Debove's clinical lectures at the Hospital de la Pitié:

"Jean, a tuberculous patient, was married to Antoinette, a young woman with no previous tendency to tuberculosis. Jean died, and his wife became phthisical. She was remarried to Louis, who had likewise no phthisical taint; Louis and Antoinette both died of phthisis. The niece of the latter, equally without phthisical taint, contracted the disease in nursing her aunt, then married, and her husband was in his turn attacked by phthisis. All these people resided in a place in which it was easy to verify the absence of hereditary taint."

Here are other observations of the same nature:

"A young woman without hereditary taint nursed a phthisical patient and contracted phthisis. She returned home, and communicated the disease to the six sisters with whom she lived. One sister survived, but she was not living with her family."

"A soldier became phthisical while with his regiment, and was therefore discharged, and returned to his family. His father, mother, two brothers, and a neighbour who nursed them, became phthisical. Yet none of them were predisposed by hereditary taint."

"A girl returned from school in consumption; on her death her room and clothes passed to her sister, who died of the same disease. A third sister died under like conditions. As their parents still survive, it is clear that the disease was not due to heredity."

This does not imply that heredity plays no part in the transmission of the disease, for the contrary is proved; yet such transmission often occurs after the child is born, and sometimes the nurse by whom it is suckled may be the source of contagion.

In the case of children brought up by hand, the infection may come from cow's milk which has not been boiled. Cows are often attacked by tuberculosis, and numerous bacilli have been found in the teats and milk of these animals.*

* *From the January Number of Frank Leslie's Popular Monthly.*

The international congress of nearly five hundred physicians lately in session in Paris was practically unanimous that consumption, or tuberculosis, is contagious and transmissible between man and beast. There was unanimity also as to the prime necessity of boiling milk and cooking meat well as a preventive of much of the consumption which now afflicts the human race. None of these conclusions are new, but they derive additional force from the unanimity with which they were declared and accepted as facts well established.

[Dr. Janeway published in the *Medical Gazette* of Dec. 30, 1882, an example of the communication of phthisis from man to dogs. A young man had suffered from pulmonary tuberculosis for some months. He had a pet dog, a black and tan terrier, that was accustomed to sleep in his master's arms every night. The dog soon became affected with a cough, as was his master, having inhaled, as Janeway thought, the breath from the phthisical patient. All signs of tuberculosis rapidly followed, and the dog soon died. A King Charles spaniel was next procured, which rapidly followed the black and tan to the grave. A Scotch terrier, which was next bought, likewise, became consumptive. This dog, however, survived his master, although he was affected with a severe cough, and was losing flesh and strength daily. E.E.S.]

Part III.

The Microbe of Pneumonia.

One of the most important micrographic discoveries of late years is that a microbe is always present in inflammation of the lungs, or pneumonia. This disease was long considered, and is still considered by the majority of doctors, to be altogether independent of any parasitic infection. It is such a matter of tradition, both among patients and their doctors, to ascribe this disease to accidental causes, and especially to a sudden chill, that the parasitic doctrine of pneumonia at once encountered a lively opposition. It is, however, now impossible to deny the important part taken by microbes in the transmission of this disease.

The microbe of pneumonia was discovered by Friedlander and Talamon in 1882. It consists of micrococci, often associated in an 8 or in short chains, and found in the sputum and lungs of pneumonic patients, either detached or encysted in the lymphatic cells.

Under a strong magnifying power, this micrococcus is seen to be shaped like a lance-head, and short rods, terminating in a

cone, are found with it. It is probable that the micrococcus is the early form of the microbe, which becomes a bacillus in the adult form (Cornil).

The presence of a microbe in pneumonia explains many facts which had remained obscure in this disease, especially the epidemics in a room or house, when several persons living together are successively attacked by pneumonia. It likewise explains the resemblance, which has long been indicated by their common name, between the pneumonia of man and the contagious pneumonia of cattle, which is well known to be essentially epidemic, transmissible by contact and inoculation.

A culture of the microbe of pneumonia can be made, and when it is inoculated into the tissue of the lung, it produces in animals a true pneumonia.

Catarrh, therefore, by affording in its diseased, and often ulcerated mucous membrane, an easily reached, and properly disposed breeding spot for Tubercle Bacilli, or consumption germs, is one of the most dangerous diseases from which any person can suffer, especially such as have inherited, or otherwise obtained, a weakness of the lungs. With the air about us filled with consumptive germs in various stages of activity, a man with catarrh makes his chance of dying of pneumonia or consumption one-third greater, and surely the proportion hourly dying from this disease is already far too heavy to make it either wise or desirable to take any additional chances.

The same is true of children. A little catarrh predisposes terribly to diphtheria, when the germs of that disease are present.

And right here let us state that no parent should pass a single night without having a Weigert Superheated Dry Air Inhaler where he can place his hand on it, even in the dark. In the past two years this remarkable invention has saved thousands of children from death from croup and diphtheria, it cutting short these terrible diseases almost before they have taken hold. It will do the same for catarrh, and by killing the catarrh germ, allow the mucous membrane to heal and become healthy, and thus do away with the foul breeding spot for diphtheria, pneumonia and consumption germs.

Consumptive parents should insist on their children using dry hot air at least once every day.

All persons near a consumptive should use the apparatus once or twice a day.

All persons with catarrh should be very careful how they approach a consumptive, and should never get within range of his breath.

Persons with an inherited tendency to consumption, or with weak lungs, should use the Weigert machine until their lungs are absolutely well and strong again.

Climate is a secondary matter while using the Weigert machine. The real cause of the disease is the "Germ," and the only method known to science to kill it and stop its breeding is the hot air cure. Using this treatment a consumptive or a person with weak lungs will get well in any climate. Without it they will succumb in any climate.

Part IV.

The Profession, the Public and the Press all Praise it.

WASHINGTON, D. C., Aug. 23d, 1889.

MR. H. H. WILSON, Cleveland, Ohio.

Dear Sir: I am in receipt of your letter of the 16th inst., making inquiries concerning the hot-air machine, and in reply will say, that I have tried every medicine known to the best physicians for the cure of consumption, and not one of them seemed to check the disease in the least. I was first taken seven years ago with a hemorrhage which was quite severe. My doctor assured me that it was from my throat, although I did not believe it. I had never had any symptoms of lung trouble, nor was consumption hereditary in my family. At the time of my first hemorrhage I weighed 175 lbs. and kept this weight until about a year and a half ago; although I have averaged two hemorrhages a year ever since the first one, but none of them seemed to impair my general health, or interfere with my business more than ten days at each time, until last summer. I then had a severe hemorrhage and my general health began to give away; a bad cough followed, which has stuck to me steady, and since that I have lost about forty pounds in weight. My physician, who is a specialist, Dr. Frank Hyatt, and who is considered the leading doctor in his line in this city, after an examination of my lungs, found that the right lung was quite badly affected, while the left one was sound, and he advised me to go to southern California and spend the winter, and he was confident that I would be restored to health. I followed his advice and remained there until the 1st of April. I never found a place, no matter how highly it had been recommended in the whole State of California, but that it had been written up for the benefit of R. R. companies and to induce people to go there; in other words, I found California as for health, the worst place I ever saw. I investigated it thoroughly, and found that all the flowery writings of circulars, which had been sent to physicians all over the country, had been written by sharp Yankees who made that a business, and got big pay for it. I found that more people were dying with consumption in California, people who had been born and raised in the State, than any other State that I could hear of. I returned to Washington on the 1st of April, very much worse than when I went, and continued to grow worse in spite of all the skill of my physicians. About two months ago my physician told me that he could not check the disease, but had seen the new cure for consumption of superheated hot air inhaled into the lungs, which was meeting with great success in Germany, where it was invented by Dr. Louis Weigert, and it had just been patented in the U. S. He advised me to send for one immediately and commence using it. I was slow to take hold of it at first, as some of the doctors claimed that a patient could not stand the severe heat of 482 deg. F. I was like a drowning man grasping for straws, so I therefore purchased the machine and began its use gradually. For the first two weeks I seemed to grow much weaker, and my cough increased. Up to that time for the past year, I have had no appetite and nothing that I did eat was at all

palatable. I was just about to discontinue the use of the machine after two weeks trial, but finally concluded to try it another week. I commenced to improve immediately, and for the first time in over a year felt hungry, and my appetite increased so much, and everything I ate tasted good to me, and was easily digested. I then missed my night sweats, which had stuck to me constantly for six months. I began to gain strength, and now after two months use my cough has improved, my appetite is as good as it ever was in my life: my night sweats are gone. I can walk up two flights of stairs without any shortness of breath, and I have gained ten pounds in thirty days. All the pains in my chest have left me for the first time in a year. I am taking no medicine whatever but am inhaling the hot air four hours per day. This is very confining, but I would not take \$10,000 for the machine which cost me \$75, if I could not get another. I feel very confident that it will result in a permanent cure. Hoping this will be a satisfactory explanation, and that you may be benefited as much as I have, I am yours truly.

C. M. McNETT.

EATON, O., Oct. 10, '89.

MR. GEO. H. WEIGERT,
N. Y.

Dear Sir: I have tried the Hot Air treatment on several patients with good results. In every case there was marked improvement, the attacks of coughing less severe, the night sweats lessened, the chills less frequent, the throat affections were improved, and the appetite regained. It is my judgment that if the apparatus could be used in time a great many patients could be cured. I think that a patient who uses the lungs to inhale and expire the hot air will increase the breathing capacity of the lungs. And as they are expecting a cure, of course they will cheerfully submit to the gymnastics from two to four hours a day.

I do not believe the hot air a specific, neither do I believe in any other specific.

But I do think the "hot air" superior to other methods for the reasons given.

Yours truly,
FRANK MICHAEL, M. D.

CRANBURY, N. J., Oct. 9, '89.

MR. G. H. WEIGERT,

Dear Sir: I have a patient who has been under "Hot-Air" treatment for the past two months. I will give you a report of his case in his own words. "My voice is clearer and stronger since I used the apparatus; my appetite has improved; I have gained **six pounds** in weight; sleep all night; blood has disappeared from expectorations, which have diminished to one-third of former quantity. General health **very much better** and am **decidedly stronger**; no chest pains; no more night sweats; and only a slight cough remains. I am very much better in every way.

JOHN GIBSON,
Cranbury Station, N. J., Oct. 9, '89."

I fully concur in the above statement in all particulars. This

patient has had Chronic Bronchitis for years, and during the past year has had a **cavity** in center of right lung.

JOHN C. HOLMES, M. D.

Cranbury, N. J., Oct. 9, '89.

CRANBURY, N. J.,

Oct. 11th, 1889.

MR. G. H. WEIGERT,

Dear Sir: Your letter at hand to day: in reply would say, that you have not erred in the least. The statement of my patient was perfectly true, and neither he nor I care if you "proclaim it from the house top." As there is nothing to be expected in the treatment of consumption from drugs, we are not justified if we do not **try** any other means that is offered us.

Very truly yours,

JOHN C. HOLMES.

TITUSVILLE, Pa., July 8, '89.

MR. GEO. H. WEIGERT,

New York.

Dear Sir: Since I wrote you last, my wife has improved wonderfully. She has gained in every way except in flesh: her appetite is good, night sweats have stopped. She goes out riding. She does not cough more than one-quarter what she did before using the apparatus. She inhales hot-air from 482 to 500 without any effort.

S. C. SHIPMAN.

TITUSVILLE, PA., July 12, '89.

MR. GEO. H. WEIGERT,

New York.

Dear Sir: Enclosed please find P. O. order for \$2.25 to cover Thermometer sent S. C. Shipman; he says he would not take a thousand dollars for his machine if he could not get another. My wife has been one of the greatest sufferers from Muscular and Chronic Rheumatism in her chest and swelling limbs, etc., affecting her breathing badly. I am going to have her try it this very day. Have you had any experience with Rheumatism?

Yours truly,

E. K. THOMPSON.

TITUSVILLE, PA., July 15, '89.

MR. JOHN J. SIMON,

Cleveland, Ohio.

Dear Sir: Yours of the 12th is at hand, and in reply would say, that I am very glad to give any information that I can in regard to the Inhaling Apparatus which my wife is using.

Before using the Apparatus my wife could not sit up but had to lay down to keep from coughing. She was so weak she could hardly walk across the room without **staggering**, or when she tried to sit up or walk it would set her coughing till she would strangle. She had night sweats; she lost in flesh from **135 to 93 lbs.**; she had no appetite, nothing tasted good.

Now these are the results of the use of the Apparatus: Night sweats have stopped, has a good appetite, eats anything and everything with a relish, rides out, walks out a little ways at a

time, last Friday evening she walked one block and back without much effort, coughs but little, in fact she has gained in every way except in flesh, and she is beginning on that. I am a poor man. I have spent more money than I have earned for the last nine months trying to get something to relieve my wife of her suffering. I have bought and run in debt for everything I could think of or hear of, and as soon as I heard of this apparatus I ordered one without knowing whether it was good for anything or not. My wife has used the apparatus seven weeks and is improving **all** the time—no money can buy the one I have until I get through with it. I would not be without it two weeks for \$1,000. Now, if you or any of your family have consumption get one by all means; if you get one do not use natural gas, but use Illuminating gas or alcohol—the gas is the best and the cheapest, also get an extra thermometer and the extra flexible tube.

Yours Respectfully,

S. C. SHIPMAN,

10 N. Washington St.,

Titusville, Pa.

SPRING HOUSE, RICHFIELD SPRINGS, N. Y., July 31, '89.

My Dear Mrs. Smith: Will you kindly send me in enclosed envelope the address of the Doctor who has treated your daughter, and if he has any circular or pamphlet, can you send it along? I have been telling people here about it and they are **wild**. Mr. Benner, a lawyer, who knows your husband is very anxious to know more of the treatment, as his son's wife is in the grasp of Consumption, and has two lovely children to leave.

Please reply as soon as convenient, and oblige,

Yours lovingly,

ELLA WHEELER WILCOX.

WINNIPEG, MANITOBA, Oct. 14th, 1889.

GEORGE H. WEIGERT, ESQ.,

Dear Sir: I have much pleasure in responding to your request in giving you a brief statement of my experience with the Hot-Air treatment in phthisis pulmonalis. Shortly after the discovery of this mode of treatment I fortunately met with a well marked case, free from all other complications, with the exception of some slight gastric disturbance. He was troubled with cough, particularly in the mornings, for over a year, was gradually losing flesh and strength, so that for the last few weeks he was unable to attend to any business. Pulse 95. Temperature 101. Considerable dullness over the apex of the left lung. His wife and some of his children died of consumption few years ago. After having the Sputa examined and being convinced of the presence of the tubercle bacilli I immediately placed him under the Hot Air treatment, together with other remedies which I found of much importance in this disease.

During the first few days of treatment he expectorated more freely, then the quantity grew gradually less, so that at the end of five weeks, the expectoration ceased entirely, and no trace of the disease could be detected in the affected lung. The patient gained eleven pounds in weight during the latter part of treat-

ment. He was discharged on the 23d day of January last, entirely well, and remained so ever since. The result in this case induced me to adopt this mode of treatment ever since, and my success has far exceeded my most sanguine expectations. I am now fully convinced that phthisis is a curable disease, when free from other serious complications.

I find your Hot-Air apparatus very suitable for the purpose for which it is intended. It is very convenient for regulating the temperature of the inspired air and also for ascertaining the temperature of the expired air. I have my consumptive patients using it daily, and all are benefited by it.

Yours, respectfully,

D. HENDERSON, M. D., F. R. S. C., P. & S. Kn.

NEWARK, N. J., June 9, '89.

MR. J. G. SIMON,

Dear Sir: Yours of the 6th inst. at hand, and I take pleasure in telling you what the "Hot-Air treatment" has done for father. Father is 76 years old, and for the past two years he has been running down quite rapidly, and I felt that he could not live much longer—not more than two or three months.

I heard of Dr. Weigert's treatment and investigated it, and I satisfied my own mind that it would help father, and so I bought an apparatus for him. Father had great trouble in breathing, and after four days of inhalation, had no more trouble in that respect. The apparatus was bought on 26th of April, and ever since then father has been rapidly improving, and as far as he is concerned we would not be without it. Father coughs less and with less effort than he has for a year at least. As regards my opinion of the apparatus I have just bought **another one** for my wife to use. She has lung trouble and has hemorrhages.

Yours, etc.,

FRANKLIN DAY,

10 Maiden Lane, New York.

P. S. I forgot to mention that father's trouble is Chronic Bronchitis or Bronchial Consumption.

F. DAY.

NO. 10 MAIDEN LANE,

NEW YORK, July 8th, 1889.

MR. THEO. C. HART,

Dear Sir: There is no doubt about my Father being greatly benefited by the use of Dr. Weigert's Hot-Air inhaler. I think my Father would not have been living to-day (he was so bad) had it not been for this treatment. I have great faith in it for chronic bronchitis, and any one troubled with their lungs, excepting where hemorrhages is the great trouble.

Yours, &c.,

F. DAY.

165 TREMONT ST., BOSTON, June 29th, 1889.

MR. GEO. WEIGERT,

Dear Sir: Please send us one Hot-Air Apparatus with Lamp.

This is for Mr. Patrick Hayes, Lawrence, Mass., a neighbor of Mr. Duggan's, through whose influence it was sold.

Enclosed find our check for same.

Yours, &c.,

LEACH & GREENE.

OAKLAND, CAL., Sept. 30, 1889.

GEO. H. WEIGERT, ESQ.,

Dear Sir: In reply to your inquiry, I have to say, that I have used the Hot-Air Apparatus for about three months, with the most flattering results. In the most pronounced case of Phthisis under my care (hereditary in a young man), hemorrhage ceased (had had nearly a hundred severe hemorrhages); night-sweats ceased; fever ceased; cough nearly ceased; fever entirely ceased; expectoration nearly ceased; and patient feels well enough to resume work. I have used Apparatus for other classes of cases with marked benefit—for example, in Acute Laryngitis, Chronic Laryngitis and Aphonia, Chronic Bronchitis, and Emphysema. The direct effect of hot air on the diseased mucus surface seems to be an effect not considered by the inventor. In a case of chronic Bronchitis of ten years standing, in a male of 60 years, when œdema of the bronchial tubes, caused a continuous asthmatic condition and such dyspnoea that for years he could not mount a flight of stairs without halting once or twice to breathe; two weeks treatment (2 services daily for $\frac{1}{4}$ to 1 hour each), caused direct, perfect relief. In this case it was noticed that the direct effect of heat within the lungs caused a prompt improvement in the pulmonary circulation, for while the pulse would be quick and wiry (from the resistance to the circulation in the lungs), before inhalation—it would become soft and full during and after the service, and would remain so for hours until finally the pulmonary circulation became steadily improved. The temperature breathed by this case was about 300 F.; by the case of Phthisis referred to from 320 F. to 345 F.; No patient has experienced the least difficulty or inconvenience. Experimentally I breathed 320 without any apparent change of feeling.

I intend to report some cases treated after more experience.

I wish you would send me all the literature you have on the subject.

Yours truly,

E. H. WOOLSEY, M. D.

BOSTON, Oct. 12, '89.

GEO. H. WIEGERT, ESQ.,

My Dear Sir: Inclosed to you the copy of address which slipped my mind until my friend handed it to me (somewhat soiled I am sorry to say), and I hasten to write you a line.

Trust you will pardon the delay, and believe me,

Yours very truly,

CHAS. F. WARNER.

Patient is already improving.

BY ALEX. BOWIE, M. D., M. S.

(From *The London Lancet*, September 14th.)

In order that the bacilli of tubercle may abundantly flourish, a temperature of 99° is a necessity. If the temperature be lowered to 84° or raised to 107.6°, they are rapidly killed, their vitality diminishing as we recede in either direction from the normal point. Such a trivial rise as 3° above the normal temperature is sufficient to markedly retard their developmental energy. With these facts in mind, it is somewhat strange that, until recently, no one

should have suggested a method by which diseases of the human being, associated with or dependent upon the bacilli of tubercle, might be treated by exposing the diseased surface to a temperature necessary for their destruction. The inhalatory treatment of phthisis is as old as Hippocrates, and apparently every conceivable method has been freely used, with the exception of superheated air. We have had fumigations with aromatic and stimulating substances, ranging from sea air to sulphurous waters, from pine cones to elaborated combinations of balsamic herbs. With the birth of chemistry, the physical properties of the air received attention, and Henshaw crystallized the thought of the time by erecting, in 1664, his *Domicilium*, where acute chest diseases were treated by condensed, and chronic by rarefied, air. The inhalation of oxygen was followed by treatment with diluted air: and, finally, phthisical patients were recommended to spend a considerable portion of their lives in diving-bells, to obtain the advantage of compressed air. The introduction of sprays of medicated and natural thermal waters marked another advance, but each system fell more or less into disuse from insufficiently satisfactory results. My experience with the inhalation of superheated air has, so far, yielded results of a very favorable nature. The apparatus used was Weigert's, in which the temperature of the air expired by the patient after a few trials may reach from 120 to 140°. The inspired air, according to the thermometer in the tube, may be as hot as 470°, but I do not think the actual inspired air is ever hotter than from 280° to 300°.

In February, 1889, I was consulted by a married man, aged twenty-seven, who had been ill since 1885. He had suffered from recurrent attacks of hæmoptysis, and had expectorated as much as thirty ounces of blood in three days. He had cough and profuse muco-purulent expectoration, containing abundance of tubercle-bacilli. There were loss of appetite, nausea and vomiting in the morning, marked wasting of the body, and shortness of breath, with inability to lie down in bed. Both apices gave the physical evidence of phthisis. The first effect of the inhalations were a slight rise in temperature, generally about half a degree, increased rapidity of the pulse rate, and diminished frequency in breathing. These lasted from one to three hours after the inhalation. The cough and expectoration were increased, but showed signs of abatement after four weeks' treatment. His morning nausea and vomiting from the first disappeared, the appetite improved, his rest was less disturbed, and his sleep was more refreshing. His sputum, as it diminished in quantity, contained relatively less of the bacilli. At the present time there is no regular cough, and expectoration is absent. He complains of no shortness of breath; there is an increase of four pounds in body weight, and the chest girth is believed to be larger. His appetite and digestion are good; he can lie down just as before his illness, and he performs the ordinary work of a shopman without any particular discomfort or consequent exhaustion. There is still present slight consolidation of his left apex, with slightly prolonged expiration, but these have diminished in a continuous line. During the treatment no medicine was prescribed. Cod-liver oil had previously been abandoned on account of gastric intolerance, but this was resumed three months ago, and has always been retained.

Since the improvement in the above case became marked, I have not hesitated to advise the treatment in several others, in each of which improvement in disease and comfort of the patient has occurred. But the one case is, I believe, a sufficient reason for calling attention to a new and most hopeful means of treating an intractable disease.

STATE OF CONNECTICUT, }
 Surgeon-General's Office, }
 WILLIMANTIC, October 25th, 1889. }

G. E. WILCOX, D. D. S.

My Dear Doctor:—I have carefully examined your pamphlet you kindly sent me with your interesting history of "The Inhalatory Treatment of Phthisis Pulmonalis by means of Superheated Air," published by Alex. Bowie, M. D., in *The Lancet*, London, England, September 14th, 1889, and I am very much impressed with the results therefrom. I cordially commend Weigert's apparatus as the best known yet to medical science, and the treatment of phthisis pulmonalis by superheated air as one that commends itself to every medical man who is interested in the progress of our noble profession.

I am, very truly yours,

(Signed)

CHARLES JAMES FOX, M. D.,
 Ex-Surgeon-General of Conn.

A Boon to Humanity.

CONSUMPTION NO LONGER AN INCURABLE DISEASE—THAT IS THE CLAIM MADE FOR DR. WEIGERT'S HOT-AIR SYSTEM.

(From *New York Tribune*, April 14th, 1889.)

"Without a shadow of a doubt, it is both certain and proved that consumption can be, has been, and is now being daily cured, and that, too, by means as simple as they are effective, and as prompt in their action as they are permanent in their effects, while their cheapness is equalled only by their convenience.

"It is with double pleasure that to this important announcement there may be added the welcome statement that it is to an American, a New Yorker, a graduate of the New York College of Physicians and Surgeons, that this wonderful and important discovery is due. Dr. Louis Weigert, for some time back continuing his medical studies and researches in Berlin, Germany, has seized upon the central fact in the great discovery of Prof. Robert Koch, that consumption is caused by a microbe or 'bacillus,' and discovered a method by which this particular bacterium may be destroyed without injury to the lung or other tissues of the patient, and without personal discomfort.

"It being known that any of the bacteria can be destroyed by abnormal conditions of heat or cold and that a prolonged temperature of 140 Fahr. was sufficient to kill them, it remained for the New York savant to devise a method as simple as effective to subject the bacilli lodged in the lung tissue to the temperature which alone was sufficient to destroy them. The apparatus which Dr. Weigert devised has undergone the test of prolonged

daily use and keenest criticism by the best specialists in the Eastern hemisphere.

" Its purpose and effect is to supply the lungs of the patient with air at a temperature up to 500° Fahr., without subjecting the rest of the body to any external increase of heat.

" In this country it has been well received by the medical fraternity and is also in use in several sanitariums and hospitals."

ATLANTIC CITY, N. J., Dec. 6, '89.

Gentlemen: Please send me by the United States Express Co. C. O. D.

One Perfected Dry Air Inhaler.

I expect that you will allow me the same discount as you offer to the trade, as otherwise you need not fill out my order.

Yours truly,

DR. ARNOLD SCHOTT,

18 New Jersey Ave,

Atlantic City, N. J.

P. S. The patient (Mrs. Long, of Philadelphia), for which I ordered an apparatus about three months ago, is continuing to improve, and gaining weight and strength.

Interview with Mr. F. A. Johnson, of Chicago.

[*Chicago Daily News*, May 22, 1889.]

CURE OF CONSUMPTION.

" If you had seen me one year ago," said Mr. Fred A. Johnson, of 751 North Park avenue, " you would have said that I would not live two months, and I would have believed you; for I really did not expect to be alive to-day. My family had given up hope and daily looked for my demise. But here I am, as well as ever I was in my life, and have no more idea of an early death than you. A year ago I could hardly drag one foot after another. My face was pale, almost ghastly, and my eyes were sunken in, and I was, as it seemed, coughing my life away. My trouble was hepatization, of the lungs, or Consumption. I would throw out great quantities of phlegm, and I had such pains in my head that I would every now and then have fainting spells. I had so much pain in my sides that I could not lie on either of my sides. I grew weaker and weaker from day to day, and was obliged to take to my bed for days at a time. I could eat but very little, and half of the time what little I did eat I could not retain on my stomach. My friends advised me to go to Florida, saying I had Consumption; but I thought that if I could not get well—for I had been told so by several physicians—I might as well remain here and die at home. I held on, however, till I was informed that Dr. Berry had successfully treated several cases somewhat similar to my own. Thinking, as did my family, that I might as well see the doctor and learn whether or not he could do anything for me, I went to his office, though scarcely able to be on my feet. While waiting in his reception-room until it was my turn to see the doctor, I was not a little surprised to see the number of patients coming to be treated. Judging from this, I was concluding that I had found the right man, when I was ushered into the doctor's consultation room. He immediately told me that

MY CASE WAS A SERIOUS ONE,

but he was sure he could bring me around all right in a few months. I think those words alone had more effect on my trouble than all of the medicine that my former physicians had prescribed for me, because from that moment I began to improve. I gained in strength, the severe pains troubled me less, and last May I was told by Dr. Berry that I was cured, and needed no further treatment. Well, sir, my family and friends could scarcely believe it, and, as for myself, I felt as though it was a miracle. Since last May I have been in the best of health, and feel as strong as the average man of my age can. Dr. Berry's treatment of my case satisfied me beyond a doubt that he is one of the best physicians in this country, and I heartily commend his treatment to all afflicted with any of the chronic diseases to which we are subjected. My son is at present under the doctor's treatment for Catarrh, and he is improving so rapidly that in a short time his name can be added to the long list of patients who have been cured by Dr. Berry's intelligent treatment."

From the *Chicago Times*.

An Interview with Mr. G. E. Camp, who Recovered From Consumption Under the Hot Air Treatment.

In answer to the card sent up by your reporter, a gentleman, the perfect picture of physical health and energy, entered the parlors of the Choate Hotel at 268 State street, and enquired the business of your representative.

"I am informed, sir, that you have been treated for Consumption by the superheated dry air method lately introduced here by Dr. Berry, of our city. If you have no objections, I would very much like to possess your opinions relative to the practical utility of the method. Will it or will it not cure Consumption?"

Mr. Camp regarded the reporter with surprise for an instant, walked to the window, returned, and seating himself, said:

"Your request is somewhat surprising to me, as I was not aware that you or any one else in Chicago knew that I had, at one time, been the victim of that most dreadful of all diseases—Consumption; however, my seemingly marvelous escape from its clutches demands, in my opinion, the throwing away of prejudices against publicity which I, in common with the majority of patients, maintain. Therefore, I will, as concisely as possible, detail my experience, in hope that it may prove of value to some fellow sufferer.

"Two years ago while a resident of New York, I spent several weeks camping among the Adirondack Mountains. Through exposure incident to the trip, I contracted a severe cold, and returning to New York was shortly confined to my bed by a long and severe attack of inflammation of the lungs. From this I rallied partially during the following spring, only to note that my former radiant health was gone, that I was racked by a continued cough, and subject to all the weakness, irritation and discouragement of a confirmed invalid. Without paying active attention to my condition, however, I struggled on, as one will under such circumstances, until forced through weakness and enervation, produced by my continued cough and night sweats, to consult a

physician. I visited one of the best in the metropolis, and after a thorough diagnosis, was at last to learn that I was the victim of Consumption in its worst form. One lung was already partially inactive, and hemorrhages had occurred. I cannot point to you the absolute horror of that awakening to the fact of my real condition. Following it came tedious and nauseous courses of treatment by the best specialists of New York, but hemorrhage followed hemorrhage with all the attendant effects, until at the end of six months my life was considered as a week's probability, a month's possibility. At this stage I was removed to one of the private hospitals of the city and coincident with my admission the physicians in charge introduced the hot air method as an experiment then newly introduced to the profession, as the discovery of a noted European practitioner. I was subjected to the treatment, not, as the physicians afterwards informed me, with any hope that it would cure me—they considered me too far gone for any earthly help—but rather to critically note the effect."

Here Mr. Knapp's eyes brightened, and his face grew animated as he continued: "From the first application of the method hemorrhage ceased. Four days later I surprised the staff of physician by requesting something more substantial than beef tea and whiskey—the only articles I could retain on my stomach before taking the treatment. Three weeks later and I could sit up, and in two months was able to take exercise. Over the following weeks I may pass quickly; it was a period of rapid and full recovery, occupied principally in eating and gaining flesh and strength. I continued the treatment two months longer, in all seven months, and what you see before you is the result. I don't believe Chicago contains a better pair of lungs than my own at the present moment. Had it not been for the superheated air method I would not be here to tell you my experience, and in answer to your question 'Can Consumption be cured!' I reply, look at me and answer the question for yourself."

From Watertown Daily Times, Oct. 17, 1889.

"Mr. J. K. Emmet has patronized Dr. Meyer's Turkish Baths on every visit since it has been established. Yesterday afternoon he took a bath and also an inhalation of hot air, and was delighted with the thoroughness and completeness of the institution. He made an engagement to take another bath after the performance and to bring his son with him, and within ten minutes after the close of the last act last evening, the jolly comedian and his son were enjoying the luxuries of Dr. Meyer's establishment. Mr. Emmet bestowed many compliments on the place. He says he will purchase one of Dr. Weigert's apparatuses and carry it with him, for it is very beneficial to the throat and lungs."

The Inhalatory Treatment of Phthisis by means of Superheated Air.

ST. CHARLES, September 10th, 1889.

G. H. WEIGERT;

Dear Sir: Received your letter dated August 26th. I cannot give you a final answer to-day, for the reason the treatment is

not finished with my case. Since the use of your Apparatus, two months, the disease is well improved and seems stopped in its progress.

Later I will tell you the final result.

I think your treatment very good—to add some years to life and perhaps to cure.

Very truly yours,

DR. O. E. PENON,
Prest.

P. S.—Please to give me the addresses of those who have bought your apparatus in Canada, if you sold some apart from the others to correspond with them. I am very glad to know the results they have obtained—greatly obliged.

DR. O. E. P.

My address: St. Charles, County of Bellechasse, P. Q., Canada.

Extract from a Lecture Given by Prof. Kohisshutter, Delivered Before the Physicians' Society of Halle, on the Saale.

(Translated from the German.)

“So far I have spoken only of these matters as possibilities, and they would be of little value if they had not been proven. It is greatly to the credit of Dr. Weigert that he, firstly, by experiments proved it to be possible by intermitting sterilization to stop the development of the tubercle bacilli and to so gradually destroy the entire number existing in the lungs: and secondly, that he has shown us the astonishing fact that persons can without any injury to themselves inhale dry air heated to a very high degree. The thermometer in Dr. Weigert's apparatus registers the temperature of the air passing it up to 500 degrees Fahrenheit. This superheated air becomes somewhat cooled in passing through the inhalation tube from the thermometer to the mouth: air also enters through the nose and corners of the mouth; therefore the inhaled air is not actually as hot as 500 degrees but still its temperature must be very high, as the exhaled air has still a temperature of 140 degrees Fahrenheit. That alone is hot enough to destroy the bacilli. By a strange coincidence I examined and treated in common with Dr. Eberius a consumptive patient who was using Dr. Weigert's apparatus, and I wish to say that the good results in his case induced me to get an apparatus myself and employ it in the treatment of several other patients. The results of my observations during seven weeks' treatment of one patient were as follows: A considerable increase in the size of the chest, its circumference increased from thirty-five to thirty-seven and a half inches; a disappearance of, firstly, a pleuritic exudation on the left side, of the abnormal respiratory sounds, of rales, and of dullness.

“The patient's difficulty in breathing ceased, and he can walk far and ascend easily. The cough at first increased slightly, the expectoration very much, then both lessened and finally stopped entirely. The general nutrition progressed favorably, and his weight increased. The general condition of patient—and this is true of all who have inhaled but a very short time—is excellent.

"There is now on both sides perfectly normal breathing. More important than these results is, however, the result shown by the microscopic examination of the sputa. In this I went to work with the greatest possible care and precision: I prepared six specimens from different portions of the sputa, and found in the first examination numerous bacilli in every field of each specimen. In the second examination, after several weeks, I found in the first preparation very few bacilli, in the second none at all, in the third about four, and so on, there being altogether in the six preparations about thirty, and I can positively maintain that I counted all that were in the preparations."

From the *Brooklyn Record Union*.

A Grand Discovery.

It may be safely assumed that no discovery of the nineteenth century will be hailed with greater satisfaction by the world at large than that made by Dr. Louis Weigert, of Berlin, Germany, it being none other than a sure and positive cure for consumption. Some years since it was discovered by Prof. Robert Koch that this terrible disease is caused by a species of microbe or bacteria, called **tubercle bacillus**, but to Dr. Weigert is due the honor of presenting to mankind the method of successfully combating these insidious and life-destroying organisms. So infinitesimal is this species of vegetable life that the most careful microscopic observation is necessary to discover their presence, and while the victim may show every external appearance of health, yet thousands of these microbes are eating away his life. To the study of this branch of his profession Dr. Weigert has devoted years of careful research, and his labors have resulted in unqualified success—in a wonderful discovery. He has perfected an apparatus for the inhalation of superheated dry air which effectually destroys the disease germs. It is known that in order that any of the bacteria may abundantly flourish, a temperature of 99 degrees is a necessity, and that a prolonged temperature above 122 degrees Fahrenheit renders their existence an impossibility. These conditions existing, it remained for this learned savant to devise a method for bringing a high temperature in direct contact with the lungs without subjecting the rest of the body to any external increase of heat. By means of a spirit lamp the apparatus may be made to supply the sufferer with a hot, dry atmosphere ranging in temperature from 100 to 450 degrees, which not only affords quick relief, but gradually destroy the death dealing germ and effects a cure. It is a boon to humanity, and from the present generation, as well as from generations yet unborn, will rise the thanks of millions, a grateful tribute to the genius of the discoverer. In this country it has been well received by the medical fraternity, and is also in use in large number of sanitariums and hospitals.

SCHENECTADY, N. Y., September 27th, 1889.

GEORGE H. WEIGERT, New York.

Dear Sir:—Yours of the 24th received. About six weeks ago I procured one of your "Hot Air" inhalation apparatuses, and have used it in one case. In fact I bought the instrument for one

of my patients, who had heard of this method and was anxious to try it. He has used it quite faithfully, not more, however, than an hour and a half per day. When the treatment was begun he was not using his right lung, and the left lung was over-worked and beginning to show signs of disease. The respiration was exaggerated, the posterior portion of the left lung showed some signs of infiltration, and the expectoration was very profuse; microscopic examination showed very few bacilli and an over-abundance of pus corpuscles; respirations were very shallow, temperature normal, pulse usually 10 faster than normal and not very strong. At the last examination of his lungs, about a week ago, the left lung was getting a great deal better, the air reaching the air cells more thoroughly, and signs of infiltration disappearing, the respiration becoming deeper. He could converse with less hesitation, and could walk upstairs with a great deal less difficulty, and his general health is much improved. Portions of the left lung which had been useless, probably from the excessive expectoration, cleared up somewhat, so that there were two or three small points at which the air reached the air cells.

(Signed)

DR. LOUIS FAUST.

The testimonials we have herein published are *only a few* taken from *many hundred*, and are only those of *recent date*, *from physicians*.

LAWRENCE, MASS.

July 11, 1889.

MR. JOHN J. SIMON,

Dear Sir: I first heard of the Weigert treatment from a man who had got cured by using it in Germany. I bought one for my sister six weeks ago. She was in consumption. We had the best medical treatment for her. They told me it was no use, she had to die. She coughed all night, and could not sleep. At this time her cough is gone. She sleeps all night, eats well and is able to walk out. If you are troubled with lung disease *get one if it is the last dollar you have*. A friend of mine, named Hayes, watched sister's case for four weeks and then got one for himself, and is also improving.

(Signed.)

ROBERT DUGAN,
Hotel Brunswick,
Lawrence, Mass.

Hot-Air Inhalation.

A "TIMES" MAN TALKS WITH DOCTOR ERNEST A. E. MEYER ABOUT
DOCTOR WEIGERT'S GREAT INVENTION.

(From *Watertown Daily Times*.)

"Good morning, Doctor. I called to learn something about this inhalation apparatus."

"You are positive, then, Doctor, that it is an infallible cure for consumption?"

"Positive, sir, positive. No immediate destruction of the

microbe is possible, but a gradual and positive improvement takes place. Any man can reason it out for himself. If we can introduce into the lungs dry air at a high temperature and that is absolutely non-injurious to the lungs, but that positively destroys the tubercle bacillus—the germ that eats the lungs—why, the conclusion is as plain as the nose on your face that it must necessarily cure the patient.”

“Have you consumptives under treatment?”

“Yes, three. All are delighted with the inhalation hot-air cure. It is a wonderful and never failing remedy; so simple and so easy to take, almost immediately loosening up the mucus and freeing the lungs.

“I have seen such wonderful immediate results from the simple treatment, that when necessary I have no hesitation in giving invalids the benefit of the treatment without charge until they themselves are convinced of its wonderful curative power.”

MONTCLAIR, N. J.

My experience with hot-air in Phthisis has been confined to one case, that of a lady age 75, in the third stage of Phthisis. She has now used the hot-air inhalations daily for four months, and has steadily improved since commencing its use. At this time she had a hard cough and profuse expectoration, especially in the morning.

The patient began to improve soon after commencing the hot-air, and has continued to do so until this time. She now coughs but little and raises probably less than one-tenth of what she did four months ago. There has been corresponding improvement in her appetite, her strength and her general condition.

Thinking that the dust necessarily inhaled with the air of a room might be detrimental, I improvised a cotton filter and placed it around the apparatus through which the cold air enters the hot air chamber, and in this way enabled my patient to breathe air which was entirely free from dust. My patient found it much easier and pleasanter to breathe this pure air, and I think improved much faster than before.

J. W. PINKHAM, M. D.,

PROFESSOR AFFLECK,

of the Royal College of Physicians, Edinburgh.

In writing on diphtheria, states “that it is now pretty generally held that in Diphtheria, although at first a local disease, the constitution becomes poisoned from the infection; that there has been discovered in the diphtheritic membrane and surrounding tissues, as well as in the blood of persons suffering from the disease, those minute vegetable organisms, Bacteria—Micrococci—which are supposed to be the infecting agents, both in the original local affection and in its constitutional effects.” He recommends hot inhalations as giving the very best results.

Again the same author, in writing upon “bronchitis,” states: “Acute Bronchitis must always be looked upon with alarm; it attacks with more dangerous violence the very young and the aged, more prominently than those in middle life—feeble frames

suffer most." He states that if any branch of the bronchial tubes becomes plugged up with secretions, so that the area of the lungs to which that branch conducts ceases to be inflated on inspiration, no fresh air entering these parts, they collapse and become of solid consistence, increased difficulty of breathing follows, and fatal results may speedily happen, especially with young children; soothing mixtures he fears are in most cases about as dangerous as beneficial, opium and other opiates doing more harm than good. He recommends from the very first hot appliances externally and hot inhalations internally, as being above all other remedies useful for this disease.

How to Obtain Treatment.

Patients suffering from Consumption, Asthma, Chronic Bronchitis, Chronic Laryngitis, Catarrh or other diseases of the Nasal, Laryngeal or Pulmonary cavities, desiring treatment by the Weigert method, should write or have their friends or physician write a full and exact statement of their case. When preferred, we will mail a series of questions the answers to which will enable our physicians to make an accurate diagnosis and in forwarding the Weigert machine to make any necessary suggestions as to diet, habits, exercise, etc.

Positively no discount will be made to anyone.

The machines are on exhibition at our offices at any time, and our physicians will take pleasure in showing them and explaining the methods. Thousands of testimonials from all parts of the world on file.

In the case of Consumptive patients or those suspecting the disease, a small sputum box will be sent free and a careful microscopical analysis of the sputum will be made as soon as it is returned to us.

Price of the Weigert Machine complete with all directions, \$25.

THE DR. LOUIS WEIGERT CO.,

23 Park Place,

New York.

The first public report of Dr. Koch's to attract general attention was that in reference to the bacterium which had been found associated with anthrax, or splenic disease, and was about 1878. His investigations went to show that the potency of this organism lay in the spores rather than in the developed bacterium. He found that, when no spores were visible in the dried diseased blood with which mice were inoculated, the power of conveying infection lasted only for a few weeks; while blood in which the spores had separated continued virulent for at least four years.

In 1882 Dr. Koch published the results of experiments which went to confirm the opinion already held by physicians who had observed the progress of the discovery of the fungoid origin of various infections, that tubercular disease was also caused by microphytic germs. He claimed not only that he had ascertained the bacterial origin of the disease, but to have detected the specific microbe, having found a characteristic and previously unknown bacillus in all tubercularly altered organs. He had observed it in pulmonary tuberculosis, cheesy bronchitis and pneumonia, tubercles of the brain, intestinal tubercles, scrofulous glands, and fungous inflammation of the joints; in all cases which he had examined of spontaneous consumption in animals—in cattle, hogs, poultry, monkeys, porpoises, and rabbits. In monkeys dead of consumption he had found the organisms in quantities pervading the lungs, spleen, liver, diaphragm, and lymphatic glands. He supposed that escaping into the air from the expectorations of phthisical patients, they were inhaled into the lungs, where they developed. Whenever the tubercular process was in its early and active stage, they were present in great numbers. When the climax of the tubercular eruption was passed, they decreased and might totally disappear.

Dr. Koch's report of this investigation was published in one of the Berlin medical journals, in a memoir on "The Etiology of Tuberculosis," of which Dr. Klein, a distinguished pathologist, said that any one who carefully reviewed it would "come to the conclusion that Dr. Koch's results are to be accepted with unconditional faith, and I have no manner of doubt will be considered by all pathologists as of the very highest importance. To those who are familiar with Dr. Koch's previous work, especially that on the etiology of splenic fever, or anthrax, and his observations on pathogenic bacteria, this last work of his, on the etiology of tuberculosis, will be an additional and brilliant testimony to his ingenious and successful method of research."

When the cholera broke out in Egypt in 1883, the German Government appointed Dr. Koch chief of a commission to go to that country, and also to India, for the purpose of watching the course of the epidemic and investigating the nature and cause of the disease.

A bill was unanimously passed by the German Parliament, in 1884, awarding a sum of 135,000 marks to Dr. Koch and his companions in this research.

The principal published works of Dr. Koch are "Etiology of Splenic Fever," 1876; "Researches on Diseases of Wound-Infections," 1878; "Inoculation for Splenic Fever," 1882; "Contributions to the Etiology of Tuberculosis," 1882; and contributions to the transactions of the German Imperial Health Bureau.

